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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/809,083	03/25/2004	Christopher L. Oesterling	GP-304641 (2760/164)	7667
7590 02/25/2008 General Motors Corporation Legal Staff, Mail Code 482-C23-B21 300 Renaissance Center P.O. Box 300 Detroit, MI 48265-3000			EXAMINER FIGUEROA, MARISOL	
			ART UNIT 2617	PAPER NUMBER
			MAIL DATE 02/25/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/809,083

Applicant(s)

OESTERLING, CHRISTOPHER L.

Examiner

Marisol Figueroa

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 November 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 21-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 21-40 have been fully considered but they are moot in view of new grounds of rejections. See rejection below.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. **Claims 21, 22, and 24-37** are rejected under 35 U.S.C. 102(e) as being anticipated by TZAMALOUKAS (US 7,188,026).

Regarding claim 21, Tzamaloukas discloses a method of operating a vehicle telematics device as a communication gateway, comprising the steps of:

receiving a transmission at the vehicle telematics device on a primary vehicle, wherein the transmission is sent from a wireless modem unit on a secondary vehicle equipped to communicate through a first communication protocol (Fig. 1; col. 3, lines 13-col. 4, lines 1-27; col. 23, lines 41-50; participating vehicles (i.e., secondary vehicle) are operative to communicate directly with other participating vehicles using an enhanced ad-hoc mode of communications (i.e., first communication protocol), the participating vehicles that have WWAN capabilities may be operative to communicate with a central server and such participating

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vehicles are mobile egress points (i.e., primary vehicle) and are operative to receive data from other participating vehicles for transmission to the central server (col. 23, lines 47-50));

establishing communication between the vehicle telematics device on the primary vehicle and a service provider through a second communication protocol for which the secondary vehicle is not equipped (col. 3, lines 43-51; col. 4, lines 22-28; mobile egress points communicates directly with the central server (i.e., service provider) via a wireless wide area network WWAN link (i.e., second communication protocol));

establishing a communication gateway between the secondary vehicle and the service provider utilizing the vehicle telematics device on the primary vehicle; communicating data between the secondary vehicle and the service provider via the communication gateway (col. 3, line 65-col. 4, lines 1-6; col. 23, lines 42-50; participating vehicles (i.e., secondary vehicle) and mobile egress points (i.e., primary vehicle) may establish an ad-hoc mode of communications when they are in range of each other, in addition the mobile egress point can transmit data received in the ad-hoc mode from other participant vehicles directly to the central server (i.e., mobile egress point may act as a mobile router-gateway)).

Regarding claim 22, Tzamaloukas discloses the method of claim 21, in addition Tzamaloukas discloses wherein the receiving step is carried out in response to a polling message transmitted from the primary vehicle (col. 10, line 48-col. 12, lines 1-64; the egress points (i.e., mobile or fixed) broadcast beacons (i.e., polling messages) for detection of the participating vehicles within range and the participating vehicles upon receiving the beacon changes its mode of communication to start to communicate (i.e., response) with the egress point).

Regarding claim 24, Tzamaloukas discloses the method of claim 21, in addition Tzamaloukas discloses wherein the first communication protocol includes at least one communications protocol selected from the list consisting of: 802.11 series, Bluetooth, Wi-Fi, direct-sequence spread spectrum, frequency-hopping spread spectrum, and shared wireless access protocol (col. 3, line 67-col. 4, lines 1-14; col. 5, line 32-41; col. 6, lines 12-20; the participating vehicle comprises a radio module with Wi-Fi used for vehicle-to-vehicle communication).

Regarding claim 25, Tzamaloukas discloses the method of claim 21, in addition Tzamaloukas discloses wherein the second communication protocol is a cellular packet protocol (col. 4, lines 23-29; a mobile egress point communicates directly with the central server via a wireless wide area network WWAN link-cellular phone link).

Regarding claim 26, Tzamaloukas discloses the method of claim 21, in addition Tzamaloukas discloses further comprising the steps of: receiving identification information at the primary vehicle; and transmitting the identification information from the primary vehicle to the service provider for authentication of the secondary vehicle (col. 13, lines 4-33).

Regarding claim 27, Tzamaloukas discloses the method of claim 21, further comprising the steps of: receiving a data stream for the communication gateway from the service provider, the data stream including instructions for the communication gateway; and implementing the received instructions (col. 23, line 54-col. 24 lines 1-15).

Regarding claim 28, Tzamaloukas discloses the method of claim 21, further comprising the steps of: receiving instructions in the form of a data stream from the vehicle telematics

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device of the primary vehicle; and executing the instructions using one or more programs stored on the secondary vehicle (col. 23, line 54-col. 24 lines 1-15).

Regarding claim 29, Tzamaloukas discloses a method of operating a vehicle telematics device as a communication gateway, comprising the steps of:

detecting at the vehicle telematics device on a primary vehicle a wireless access point for a secondary vehicle; establishing communication between the secondary vehicle and the vehicle telematics device on the primary vehicle utilizing a first communication protocol (Fig. 1; col. 3, lines 13-col. 4, lines 1-27; col. 5, lines 32-36; col. 6, lines 12-20; col. 23, lines 41-50; participating vehicles (i.e., secondary vehicle) are operative to communicate directly with other participating vehicles using an enhanced ad-hoc mode of communications (i.e., first communication protocol) when they are in range of each other (note that it is inherent that when in range of each other the vehicles detect each other signals from their radio modules), including communications with participating vehicles that have WWAN capabilities that are mobile egress points (i.e., primary vehicle));

establishing communication between the vehicle telematics device on the primary vehicle and a service provider utilizing a second communication protocol not supported by the secondary vehicle (col. 3, lines 43-51; col. 4, lines 22-28; col. 6, lines 11-26; mobile egress points (i.e., primary vehicle) communicates directly with the central server (i.e., service provider) via a wireless wide area network WWAN link (i.e., second communication protocol); WWAN radio is only present in a small percentage of the participating vehicles for vehicle-to-central server communications); and

communicating software updates to the secondary vehicle from the service provider via the primary vehicle (col. 53-64; updates to the on-board software of the participating vehicles can be downloaded from the central server (i.e., service provider) through the egress points (i.e., primary vehicle) to the on-board equipment of the participating vehicle (i.e., secondary vehicle)).

Regarding claim 30, Tzamaloukas discloses the method of claim 29, in addition Tzamaloukas discloses wherein the secondary vehicle is not equipped to communicate through the second communication protocol (col. 3, lines 24-46; col. 6, lines 12-15; the WWAN radio (i.e., second communication protocol) is optional and may be present only in a small percentage of participating vehicles (i.e., mobile egress point/primary vehicle); therefore, the participating vehicles not having the WWAN radio are characterized as the secondary vehicles).

Regarding claim 31, Tzamaloukas discloses the method of claim 29, in addition Tzamaloukas discloses wherein the detecting step further comprises detecting a wireless modem unit on the secondary vehicle (Fig. 1; col. 3, lines 13-col. 4, lines 1-27; col. 5, lines 32-36; col. 6, lines 12-20; col. 23, lines 41-50; participating vehicles (i.e., secondary vehicle) are operative to communicate directly with other participating vehicles using an enhanced ad-hoc mode of communications (i.e., first communication protocol) when they are in range of each other (note that it is inherent that when in range of each other the vehicles detect each other signals from their radio modules).

Regarding claim 32, Tzamaloukas discloses the method of claim 29, in addition Tzamaloukas discloses wherein the detecting step further comprises receiving a transmission at the vehicle telematics device on the primary vehicle in response to a polling message transmitted from the primary vehicle (col. 10, line 48-col. 12, lines 1-64; the egress points (i.e., mobile or

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fixed) broadcast beacons (i.e., polling messages) for detection of the participating vehicles within range and the participating vehicles upon receiving the beacon changes its mode of communication to start to communicate (i.e., response) with the egress point).

Regarding claim 33, Tzamaloukas discloses the method of claim 29, in addition Tzamaloukas discloses wherein the step of establishing communication between the secondary vehicle and the vehicle telematics device on the primary vehicle further comprises establishing communication between a wireless modem unit on the secondary vehicle and the vehicle telematics device on the primary vehicle (Fig. 1; col. 3, lines 13-col. 4, lines 1-27; col. 5, line 32 – col. 6, lines 1-23; participating vehicles (i.e., secondary vehicle) are operative to communicate directly with other participating vehicles using an enhanced ad-hoc mode of communications through their Wi-Fi radio modules).

Regarding claim 34, Tzamaloukas discloses the method of claim 29, in addition Tzamaloukas discloses further comprising the steps of: receiving a data stream for the secondary vehicle from the service provider, the data stream including instructions for the secondary vehicle; and implementing the received instructions at the secondary vehicle (col. 23, line 54-col. 24 lines 1-15).

Regarding claim 35, Tzamaloukas discloses the method of claim 29, in addition Tzamaloukas discloses further comprising the steps of: receiving instructions in the form of a data stream from the vehicle telematics device of the primary vehicle; and executing the instructions using one or more programs stored on the secondary vehicle (col. 23, line 54-col. 24 lines 1-15).

Regarding claim 36, Tzamaloukas discloses the method of claim 29, in addition Tzamaloukas discloses further comprising the steps of: storing the software updates from the service provider in a database located on the primary vehicle; and updating the secondary vehicle with the software updates when communication is established between the primary vehicle and secondary vehicle (col. 14, lines 54-64; new or updated version of components can be stored at the egress points (i.e., primary vehicle) and the participating vehicles can download the software from the egress point).

Regarding claim 37, Tzamaloukas discloses the method of claim 29, in addition Tzamaloukas discloses further comprising the steps of: notifying the service provider of an identification of one or more secondary vehicles; initiating one or more programs for updating software on the one or more secondary vehicles; and providing software updates to the one or more secondary vehicles (col. 14, lines 54-64).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claim 23** is rejected under 35 U.S.C. 103(a) as being unpatentable over TZAMALOUKAS in view of CHENG et al. (US 6,954,612).

Regarding claim 23, Tzamaloukas discloses the method of claim 29, but Tzamaloukas does not particularly disclose wherein the receiving step further comprises receiving a request

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from the secondary vehicle to establish a communication gateway for the secondary vehicle to the service provider.

However, Cheng teaches receiving a request for the establishment of a communication gateway to the service provider (Figs. 6-7; col. 5, lines 22-40; when UE 604 (i.e., secondary vehicle) does not have a direct link with Node B (see Fig. 6) and needs to send messages, UE 604 sends a relay query signal (i.e., request) to one or more UEs in the cell in order to establish a connection (i.e., communication gateway) with any UEs that received the query signal to relay the messages to the Node B). Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention, to modify Tzamaloukas to include wherein the receiving step further comprises receiving a request from the secondary vehicle to establish a communication gateway for the secondary vehicle to the service provider, as suggested by Cheng, in order to confirm that the requesting UE (i.e., secondary vehicle) is enabled to send the message via the relay UE (i.e., communication gateway).

6. **Claims 38-39** are rejected under 35 U.S.C. 103(a) as being unpatentable over TZAMALOUKAS in view of BONTA et al. (US 2004/0063451).

Regarding claim 38, Tzamaloukas discloses a method of operating a vehicle telematics device as a communication gateway, comprising the steps of:

detecting at the vehicle telematics device on a primary vehicle a wireless access point to a local secondary vehicle; establishing communication between the secondary vehicle and the primary vehicle utilizing a first communication protocol (Fig. 1; col. 3, lines 13-col. 4, lines 1-27; col. 5, lines 32-36; col. 6, lines 12-20; col. 23, lines 41-50; participating vehicles (i.e., secondary vehicle) are operative to communicate directly with other participating vehicles using

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an enhanced ad-hoc mode of communications (i.e., first communication protocol) when they are in range of each other (note that it is inherent that when in range of each other the vehicles detect each other signals from their radio modules), including communications with participating vehicles that have WWAN capabilities that are mobile egress points (i.e., primary vehicle));

establishing communication between the vehicle telematics device on the primary vehicle and a service provider utilizing a second communication protocol not enabled on the secondary vehicle (col. 3, lines 43-51; col. 4, lines 22-28; col. 6, lines 11-26; mobile egress points (i.e., primary vehicle) communicates directly with the central server (i.e., service provider) via a wireless wide area network WWAN link (i.e., second communication protocol); WWAN radio is only present in a small percentage of the participating vehicles for vehicle-to-central server communications).

But, Tzamaloukas does not particularly disclose notifying the service provider from the vehicle telematics device of the identification of the secondary vehicle; and communicating triggers to the secondary vehicle from the service provider via the primary vehicle.

However, Bonta teaches notifying the service provider the identification of the secondary vehicle and communicating triggers to the secondary vehicle from the service provider via the primary vehicle (Fig. 2; paragraphs [0025]-[0032]; mobile unit 102 not having a direct connection with infrastructure 106 (i.e., secondary vehicle) communicates through one of the relay nodes 202, 104 (i.e., primary vehicle), the mobile unit prepares a registration proxy message containing the mobile unit's identity and is sent to the infrastructure through the relay node (i.e., notifying identification of secondary vehicle), when the infrastructure receives the message it records the registration of the mobile unit and the route to which future pages can be

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delivered (i.e., triggers), so that future pages to the mobile unit are delivered through the relay node). Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention, to modify Tzamaloukas to include wherein notifying the service provider from the vehicle telematics device of the identification of the secondary vehicle; and communicating triggers to the secondary vehicle from the service provider via the primary vehicle, as suggested by Bonta, since such a modification would provide the service provider with knowledge of the vehicles to which information should be relayed through other vehicles.

Regarding claim 39, the combination of Tzamaloukas and Bonta disclose the method of claim 38, in addition Tzamaloukas discloses further comprising the steps of: receiving instructions in the form of a data stream from the primary vehicle at the secondary vehicle; and executing the instructions upon activation of the communicated triggers (col. 23, line 54-col. 24 lines 1-15).

7. **Claim 40** is rejected under 35 U.S.C. 103(a) as being unpatentable over TZAMALOUKAS in views of BONTA et al. and DOHERTY et al. (US 7,212,893).

Regarding claim 40, the combination of Tzamaloukas and Bonta disclose the method of claim 38, but the combination does not particularly disclose further comprising the step of triggering the secondary vehicle to provide diagnostic data to the service provider via the primary vehicle.

However, Doherty teaches providing diagnostic data to the service provider via the primary vehicle (Abstract; col. 3, lines 24-43; col. 5, lines 24-38; an automobile wireless transmit diagnostic data to a server via a plurality of gateways (i.e., primary vehicle)). Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention, to

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modify the combination to include providing diagnostic data to the service provider via the primary vehicle, as suggested by Doherty, in order for the service provider to analyze the vehicle's performance and provide feedback regarding conditions that require immediate attention.

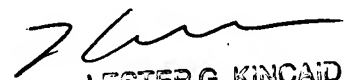
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marisol Figueroa whose telephone number is (571) 272-7840. The examiner can normally be reached on Monday Thru Friday 8:30 a.m. - 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester G. Kincaid can be reached on (571) 272-7922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


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Art Unit 2617


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